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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,286	07/05/2005	Heiko Brunner	B-7240	1772

7590 08/26/2010
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EXAMINER

WILLIS, DOUGLAS M

ART UNIT	PAPER NUMBER
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1624

MAIL DATE	DELIVERY MODE
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08/26/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/538,286	Applicant(s) BRUNNER ET AL.	
	Examiner DOUGLAS M. WILLIS	Art Unit 1624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-11 and 13-31 is/are pending in the application.
- 4a) Of the above claim(s) 15-29 and 31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11 and 14 is/are rejected.
- 7) ☒ Claim(s) 1, 3-10, 13 and 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

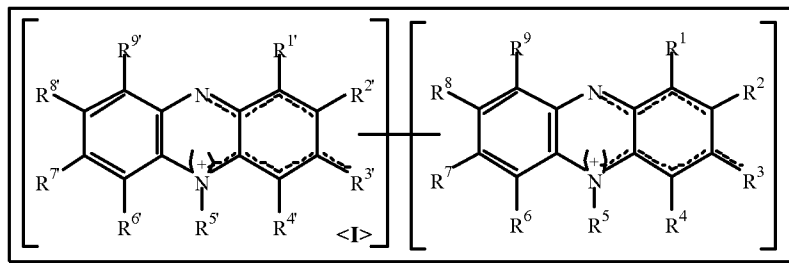
Status of the Claims / Priority

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the *Final Rejection*, mailed on October 27, 2009, has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission, filed on June 28, 2010, has been entered.

Claims 1, 3-11 and 13-31 are pending in the current application. According to the *Amendments to the Claims*, filed June 28, 2010, claims 1, 3, 8, 9, 11, 14 and 30 were amended and claims 2 and 12 were cancelled. This application is a 35 U.S.C. § 371 National Stage Filing of International Application No. PCT/EP2003/013994, filed December 9, 2003, which claims priority under 35 U.S.C. § 119(a-d) to DE 102618526, filed December 20, 2002.

Status of Restrictions / Election of Species

Applicant's affirmation of the following election, with traverse, in the reply filed on



September 24, 2009, is acknowledged: a) Group I - claims 1, 3-11, 13, 14 and 30; and b) substituted phenazinium

salt of formula I - p. 23, example vii.

The requirement was made FINAL in the *Non-Final Rejection*, mailed on April 10, 2009.

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Claims 15-29 and 31 were withdrawn from further consideration, pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

The sections of U.S.C. Title 35 that formed the basis of prior rejections formulated, as well as any references supporting said rejections, that are not included with this Office action, may be found in either the *Non-Final Rejection*, mailed on April 10, 2009, or the *Final Rejection*, mailed on October 27, 2009. Furthermore, any rejections and/or objections of record not explicitly addressed herein below, are hereby withdrawn, in light of applicant's arguments and/or the *Amendments to the Claims*, filed June 28, 2010.

Thus, a third Office action and prosecution on the merits of claims 1, 3-11, 13, 14 and 30 is contained within.

New Claim Objections

Claim 1 is objected to because of the following informalities: ***general*** *chemical formulae* should be replaced with *chemical formulae*; b) *with the proviso that they do not represent a single bond* should be omitted, with respect to R^5 , $R^{5'}$ and $R^{5''}$; and c) *hydroxyl* should be replaced with *hydroxy*, with respect to R^2 , $R^{2'}$, $R^{2''}$, R^3 , $R^{3'}$, $R^{3''}$, R^7 , $R^{7'}$, $R^{7''}$, R^8 , $R^{8'}$ and $R^{8''}$. Appropriate correction is required.

Claim 6 is objected to because of the following informalities: ***an*** *alkylated amine* should be replaced with ***a lower*** *alkylated amine* to avoid issues under 35 U.S.C. § 112, second paragraph. Appropriate correction is required.

Claim 7 is objected to because of the following informalities: *alkylated amine* should be

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replaced with ***lower alkylated amine*** to avoid issues under 35 U.S.C. § 112, second paragraph. Appropriate correction is required.

Claim 8 is objected to because of the following informalities: ***an phenyl group*** should be replaced with *phenyl*. Appropriate correction is required.

Claims 8 and 9 are independently objected to because of the following informalities: the claims are substantially duplicative, since they are so close in content that they both cover the same thing, despite a slight difference in wording. Moreover, claim 9 fails to further limit claim 8. Appropriate correction is required. See 37 CFR 1.75 and MPEP § 706.03(k).

The examiner suggests cancelling claim 9, to overcome this objection.

Claims 3-5, 10, 13 and 30 are independently objected to because of the following informalities: the claims are dependent upon an objected base claim. Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 112, Second Paragraph

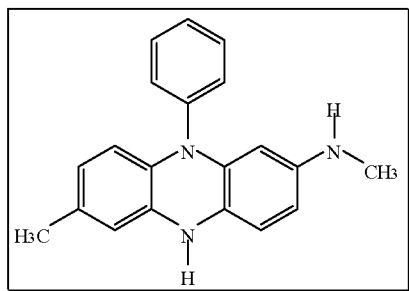
The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 11 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

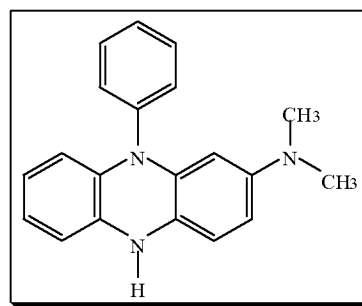
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Claim 11 recites the limitation *the mixture of oligomeric phenazinium compounds*



according to claim 1, wherein the monomeric units in the compounds are selected from the group consisting of: in lines 1-3 of the claim. There is insufficient antecedent basis, in claim 1, for this limitation, with respect to 7-*N*-methylamino-2-

methyl-5-phenyl-5,10-dihydrophenazine, shown to the left above, and 2-*N,N*-dimethylamino-10-phenyl-5,10-dihydrophenazine, shown to the right. According to claim 1, at least one of the residues selected from the group consisting of R^2 , $R^{2'}$, $R^{2''}$, R^3 , $R^{3'}$, $R^{3''}$, R^7 , $R^{7'}$, $R^{7''}$, R^8 , $R^{8'}$ and $R^{8''}$ must be either halogen or hydroxy, with respect to the substituted phenazinium salts of the formula <I> or formula <II>.



The examiner suggests omitting 7-*N*-methylamino-2-methyl-5-phenyl-5,10-dihydrophenazine and 2-*N,N*-dimethylamino-10-phenyl-5,10-dihydrophenazine, to overcome this rejection.

Claim 14 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 recites the limitation *the mixture of oligomeric phenazinium compounds according to claim 1, selected from the group consisting of:* in lines 1-2 of the claim. There is insufficient antecedent basis, in claim 1, for this limitation, with respect to the following substituted phenazinium salts of the formula <I> or formula <II>:

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8,8'-bis-(*N,N*-dimethylamino)-3-3'-dimethyl-10,10'-diphenyl-[2,2']biphenaziny-10,10'-ium tetrafluoroborate;

8,8'-bis-(*N,N*-dimethylamino)-10,10'-diphenyl-3-methyl-[2,2']biphenaziny-10,10'-ium tetrafluoroborate;

3,8',8''-tris-(*N,N*-dimethylamino)-8-methyl-5,10',10''-triphenyl-[2,2';7',2'']terphenazine-5,10',10''-ium tetrafluoroborate;

8'-bis-(*N,N*-diethylamino)-8-*N,N*-dimethylamino-3-methyl-10,10'-diphenyl-[2,2']biphenaziny-10,10'-ium sulfate;

8,8'-bis-(*N,N*-dimethylamino)-10,10'-dimethyl-[2,2']biphenaziny-10,10'-ium hydrogen sulfate;

8,3',3''-tris-(*N,N*-dimethylamino)-8-methyl-5,10',10''-triphenyl-[2,2';7',2'']terphenazine-5,10',10''-ium tetrafluoroborate; and

8,8'-bis-(*N,N*-dimethylamino)-10,10'-diphenyl-[2,2']biphenaziny-10,10'-ium tetrafluoroborate.

According to claim 1, at least one of the residues selected from the group consisting of R^2 , $R^{2'}$, $R^{2''}$, R^3 , $R^{3'}$, $R^{3''}$, R^7 , $R^{7'}$, $R^{7''}$, R^8 , $R^{8'}$ and $R^{8''}$ must be either halogen or hydroxy, with respect to the substituted phenazinium salts of the formula <I> or formula <II>.

The examiner suggests omitting the aforementioned species, to overcome this rejection.

Allowable Subject Matter

No claims are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOUGLAS M. WILLIS, whose telephone number is 571-270-5757. The examiner can normally be reached on Monday thru Thursday from 8:00-6:00 EST. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. James O. Wilson, can be reached on 571-272-0661. The fax phone number for

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the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DOUGLAS M WILLIS/
Examiner, Art Unit 1624

**/James O. Wilson/
Supervisory Patent Examiner, AU 1624**